

isc Silicon NPN Power Transistor
KTC3503
DESCRIPTION

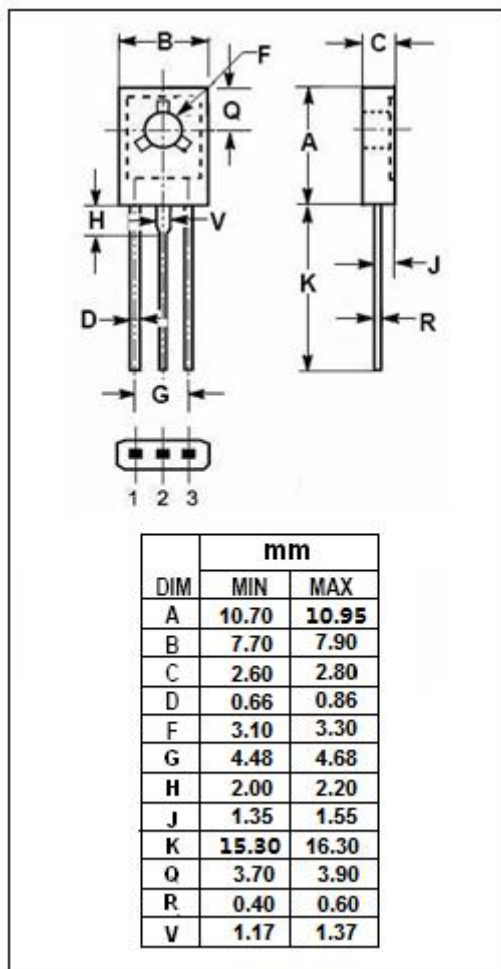
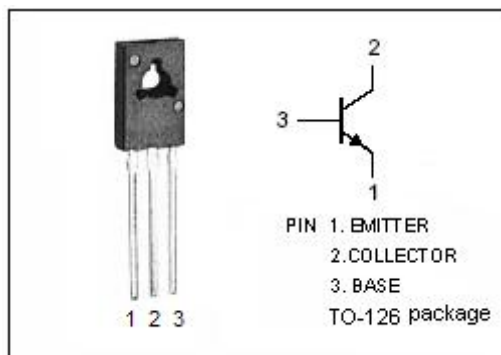
- Low Collector Saturation Voltage
- High breakdown voltage
- Silicon NPN epitaxial planar transistor
- Small reverse transfer capacitance and excellent high frequency characteristic
- Complement to KTA1381
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- For high definition CRT display ,video output

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	300	V
V_{CEO}	Collector-Emitter Voltage	300	V
V_{EBO}	Emitter-Base Voltage	5	V
I_c	Collector Current-Continuous	0.1	A
P_c	Collector Power Dissipation @ $T_c=25^{\circ}\text{C}$	7	W
T_J	Junction Temperature	150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$



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ELECTRICAL CHARACTERISTICS

 $T_c=25^{\circ}\text{C}$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CBO}$	Collector-Base breakdown voltage	$I_C=10\mu\text{A}$; $I_B=0$	300			V
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	$I_C=1\text{mA}$; $I_B=0$	300			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=10\mu\text{A}$; $I_C=0$	5			V
$V_{CE(sat)}$	Collector-Emitter Saturation Voltage	$I_C=20\text{mA}$; $I_B=2\text{mA}$			0.6	V
$V_{BE(sat)}$	Base-Emitter Saturation Voltage	$I_C=20\text{mA}$; $I_B=2\text{mA}$			1.0	V
I_{CBO}	Collector Cutoff Current	$V_{CB}=300\text{V}$; $I_E=0$			1.0	μA
I_{EBO}	Emitter Cutoff Current	$V_{EB}=4\text{V}$; $I_C=0$			1.0	μA
h_{FE}	DC Current Gain	$I_C=10\text{mA}$; $V_{CE}=10\text{V}$	60		200	
f_T	Current-Gain—Bandwidth Product	$I_E=-10\text{mA}$; $V_{CE}=10\text{V}$		150		MHz

◆ h_{FE} Classifications

O	Y
60-120	100-200

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